We claim:

1. A binding assay for sensing analyte mass in a liquid sample, comprising:
   a) immobilizing an array on a substrate, wherein the array comprises a plurality of sorbent zones, wherein a sorbent zone comprises an analyte binding partner;
   b) contacting a defined volume of sample believed to contain an analyte with at least one sorbent zone, the analyte binding partner in the sorbent zone being present in excess relative to the analyte, so that any analyte present in the defined volume is substantially depleted from the sample to form an analyte capture complex with the analyte binding partner;
   c) tagging the analyte capture complex with a fluorescent label;
   d) illuminating the sorbent zone with a laser in the absence of liquid;
   e) detecting fluorescence emissions from any sorbent zone having an analyte capture complex tagged with a fluorescent label, thereby determining the analyte mass harvested from the defined volume of sample.

2. An assay according to claim 1 wherein the substrate is selected from the group consisting of polycarbonate, polystyrene, polyethylene, polypropylene, and polymethylmethacrylate.

3. An assay according to claim 1 wherein the substrate is a film, sheet, strip, particle, or microtiter plate.

4. An assay according to claim 1 wherein the analyte binding partner is immobilized by covalent binding to the substrate.

5. An assay according to claim 1, the sorbent zones further comprising a first binding partner attached to the substrate, the first binding partner forming a first binding complex with a conjugate, the conjugate comprising a first ligand and the analyte binding partner, wherein the first ligand binds specifically with the first binding partner and the analyte binding partner can bind specifically with the analyte.

6. An assay according to claim 5 wherein the first binding partner is avidin or streptavidin and the first ligand is biotin.

7. An assay according to claim 6 wherein the conjugate is biotinylated antibody.

8. An assay according to claim 5 wherein the first binding partner is immobilized by covalent attachment to the substrate.

9. An assay according to claim 1 wherein the tagging step further comprises: incubating the analyte capture complex with a labeled binding partner, the labeled binding partner having a fluorescent label and being capable of binding to the analyte capture complex.

10. An assay according to claim 9 wherein the labeled binding partner comprises an antibody.

11. An assay according to claim 1 wherein the fluorescent label is a cyanine dye.

12. An assay according to claim 11 wherein the cyanine dye is selected from the group consisting of La Jolla Blue, Cy5, BCy5, DBCy5, Cy7, BCy7, and DBCy7.

13. An assay according to claim 1 wherein the defined volume of sample is from about 20 µl to about 500 µl.

14. An assay according to claim 1 wherein the amount of the analyte binding partner immobilized in a sorbent zone is from 10^5 to about 10^{12} molecules of analyte binding partner.

15. An assay according to claim 1 wherein about 10^5 to about 10^{10} molecules of analyte are detected per sorbent zone.

16. An assay according to claim 1 wherein the diameter of the sorbent zones is about 60 μm to about 500 μm.

17. An assay according to claim 1 wherein the analyte binding partner is an antigen, antibody, oligonucleotide, or receptor.

18. An assay according to claim 1, wherein the array of sorbent zones comprises a plurality of different analyte binding partners.

19. An assay according to claim 18, the sorbent zones further comprising at least two subsets, wherein a first subset of sorbent zones contains a first analyte binding partner and a second subset of sorbent zones contains a second analyte partner.

20. An assay according to claim 1 wherein the immobilizing step further comprises dispensing droplets using a printer jet to form the array of sorbent zones.

21. An assay according to claim 1 wherein the volume of the droplets is about 80 pl to about 1 nl.

22. An assay according to claim 1 wherein the illuminating step is conducted by directing near infrared emissions through a prism coupler, into the substrate, thereby producing evanescent wave excitation of fluorescence.

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23. An analyte binding array for harvesting analyte from a liquid sample, the array comprising a plurality of sorbent zones immobilized on a substrate, wherein a sorbent zone comprises an analyte binding partner, the analyte binding partner being present in an amount sufficient to substantially deplete the analyte from a sample, the zone being less than about 500 μm in diameter and the sample containing about 10^5 to about 10^{10} molecules of analyte.

24. An array according to claim 23, wherein the array of sorbent zones comprises a plurality of different analyte binding partners.

25. An array according to claim 24, the sorbent zones further comprising at least two subsets, wherein a first subset of sorbent zones contain a first analyte binding partner and a second subset of sorbent zones contain a second analyte partner.

26. A kit for use in a binding assay that senses analyte mass in a liquid sample, comprising an analyte binding array according to claim 23, and a container comprising labeled binding partner, the labeled binding partner having a fluorescent label and being capable of binding to an analyte bound by an analyte binding partner.

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